



IFW

# CERTIFICATE OF MAILING

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on Aug. 22, 2005

Candice P. Dysart

(Typed or printed name of person mailing correspondence)

Candice P. Dysart

(Signature of person mailing correspondence)

U.S. Serial Number: **10/618,119**

Filing Date: **July 11, 2003**

Title: **Highly Efficient Method of Mixing Dissimilar Fluids Using Mechanically Induced Cavitation**

Our Reference Number: **H147 1020.1**

Transmittal Form

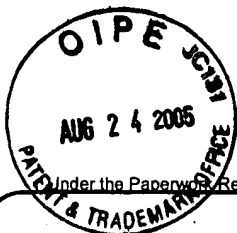
Fee Transmittal

First Supplemental Information Disclosure Statement

Form PTO/SB/08A

2 References

Return Postcard



PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

|                        |                      |
|------------------------|----------------------|
| Application Number     | 10/618,119           |
| Filing Date            | July 11, 2003        |
| First Named Inventor   | Kelly Hudson         |
| Art Unit               | 1712                 |
| Examiner Name          | Metzmaier, Daniel S. |
| Attorney Docket Number | H147 1020.2          |

**ENCLOSURES (Check all that apply)**

|   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>2 Cited References, Return Postcard |
| <b>Remarks</b>  |  |  |

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

|              |                                       |          |        |
|--------------|---------------------------------------|----------|--------|
| Firm Name    | WOMBLE CARLYLE SANDRIDGE & RICE, PLLC |          |        |
| Signature    |                                       |          |        |
| Printed name | Jeffery B. Arnold                     |          |        |
| Date         | 8/19/05                               | Reg. No. | 39,540 |

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

|                       |                   |      |         |
|-----------------------|-------------------|------|---------|
| Signature             |                   |      |         |
| Typed or printed name | Candice P. Dysart | Date | 8/22/05 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/17 (12-04v2)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2005

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

0

**Complete if Known**

|                      |                            |
|----------------------|----------------------------|
| Application Number   | 10/618,119                 |
| Filing Date          | July 11, 2003              |
| First Named Inventor | Kelly Hudson               |
| Examiner Name        | Metzmaier, Daniel S.       |
| Art Unit             | 1712                       |
| Attorney Docket No.  | H147 1020.2 (30727.0009.0) |

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☒ Deposit Account Deposit Account Number: 09-0528 Deposit Account Name: Womble Carlyle Sandridge & Rice, PLLC

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below☐ Charge fee(s) indicated below, **except for the filing fee**☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17☒ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

| Application Type | FILING FEES |                       | SEARCH FEES |                       | EXAMINATION FEES |                       | Fees Paid (\$) |
|------------------|-------------|-----------------------|-------------|-----------------------|------------------|-----------------------|----------------|
|                  | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)         | Small Entity Fee (\$) |                |
| Utility          | 300         | 150                   | 500         | 250                   | 200              | 100                   |                |
| Design           | 200         | 100                   | 100         | 50                    | 130              | 65                    |                |
| Plant            | 200         | 100                   | 300         | 150                   | 160              | 80                    |                |
| Reissue          | 300         | 150                   | 500         | 250                   | 600              | 300                   |                |
| Provisional      | 200         | 100                   | 0           | 0                     | 0                | 0                     |                |

**2. EXCESS CLAIM FEES****Fee Description**

Each claim over 20 (including Reissues)

| Fee (\$) | Small Entity Fee (\$) |
|----------|-----------------------|
| 50       | 25                    |

Each independent claim over 3 (including Reissues)

|     |     |
|-----|-----|
| 200 | 100 |
|-----|-----|

Multiple dependent claims

|     |     |
|-----|-----|
| 360 | 180 |
|-----|-----|

| Total Claims | Extra Claims | Fee (\$) | Fee Paid (\$) |
|--------------|--------------|----------|---------------|
| - 20 or HP = | x            | =        | 0             |

HP = highest number of total claims paid for, if greater than 20.

| Indep. Claims | Extra Claims | Fee (\$) | Fee Paid (\$) |
|---------------|--------------|----------|---------------|
| - 3 or HP =   | x            | =        | 0             |

HP = highest number of independent claims paid for, if greater than 3.

| Multiple Dependent Claims |               |
|---------------------------|---------------|
| Fee (\$)                  | Fee Paid (\$) |
| 0                         | 0             |

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof | Fee (\$) | Fee Paid (\$) |
|--------------|--------------|--|----------|---------------|
| - 100 =      | / 50 =       | (round up to a whole number) x                   | 0        | 0             |

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

**Fees Paid (\$)**

Other (e.g., late filing surcharge):

0

**SUBMITTED BY**

|                   |                   |  |                          |
|-------------------|-------------------|--|--------------------------|
| Signature         |                   | Registration No. (Attorney/Agent) 39,540 | Telephone (404) 879-2433 |
| Name (Print/Type) | Jeffery B. Arnold |  | Date August 19, 2005     |

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**PATENTS**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

application of: )  
)  
**Kelly Hudson et al.** )  
)  
Serial No: **10/618,119** ) Art Unit: **1712**  
)  
Filed: **July 11, 2003** ) Examiner: **Metzmaier, Daniel S.**  
)  
For: **HIGHLY EFFICIENT METHOD OF** ) Conf. No.: **4101**  
**MIXING DISSIMILAR FLUIDS USING** )  
**MECHANICALLY INDUCED** )  
**CAVITATION** )

**FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

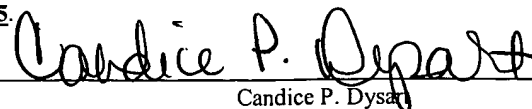
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The citation of information on the attached Form PTO/SB/08A, "Information Disclosure Statement By Applicant" is made pursuant to 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. §1.98(d), inasmuch as this application relies on prior application Serial No. 09/747,469, filed December 20, 2000, which is now Patent No. 6,627,784, which relies on prior application Serial No. 60/204,838, filed on May 17, 2000, for an earlier filing date under 35 U.S.C. §120, no copy of any patent, publication or other information previously cited by or submitted to the Office in such prior application is being provided herewith.

Applicant advises that according to a DataBase, Japanese reference 48-61704 (Cite No. 3 on attached Form PTO/SB/O8A) corresponds to U.S. No. Patent 3,873,414, which was previously cited in this application. A copy of the Japan reference is enclosed, however, a translated copy of the reference is not.

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Candice P. Dysart

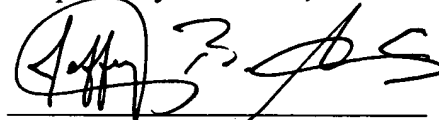
The Examiner is specifically requested not to rely solely on the information submitted herein. On the contrary, the Examiner is requested to conduct an independent and thorough review of the information, and to form independent opinions as to their significance.

It is respectfully requested that the Examiner initial and return copies of the enclosed Form PTO/SB/08A and to indicate in the official file wrapper of the above-identified patent application that each item of the cited information has been considered.

The citation of this information does not constitute an admission that any of the materials are available as a reference or of priority, or a waiver of any right applicant may have under applicable statutes, Rules of Practice in patent cases, or otherwise.

Pursuant to 37 C.F.R. §1.97(b)(3) Applicants respectfully assert that no fee is due. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to deposit account no. 09-0528.

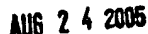
Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeffery B. Arnold", written over a horizontal line.

Jeffery B. Arnold  
Reg. No. 39,540

Womble Carlyle Sandridge & Rice, PLLC  
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Atlanta, GA 30357-0037  
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(404) 879-2933 (Facsimile)

Docket No.: H147 1020.2 (30727.0009.0)



Approved for use through 10/31/2002 OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for Form 1449/

(use as many sheets as necessary)

|       |   |    |   |
|-------|---|----|---|
| Sheet | 1 | of | 1 |
|-------|---|----|---|

**Complete if Known**

|                             |                             |
|-----------------------------|-----------------------------|
| <b>Application Number</b>   | <b>10/618,119</b>           |
| <b>Filing Date</b>          | <b>07/11/03</b>             |
| <b>First Named Inventor</b> | <b>Kelly Hudson et al.</b>  |
| <b>Group Art Unit</b>       | <b>1712</b>                 |
| <b>Examiner Name</b>        | <b>Metzmaier, Daniel S.</b> |
| <b>Attorney Docket No.</b>  | <b>H147 1020.2</b>          |

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

<sup>1</sup> Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent document, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.